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September 9, 2005 (12:42pm)

Docket: AM-2406

REMARKS

Claims 21-50 and 54-57 remain in the application.

The last four claims have been renumbered to avoid a numbering duplication with non-entered claims.

The Examiner has rejected claim 31 under 35 U.S.C. §112, ¶2 for lack of antecedent basis for the static magnetic field. This error dates back to the response of April 9, 2003 in which limitations of the parent claim were erroneously not included in the claim rewritten in independent form. Claim 31 has been amended to cure the lack of antecedent basis.

The Examiner has rejected claims 21, 22, 24, 27-29, 32-43, 45, 46, 48-50, and 53 (now 54) under 35 U.S.C. §103(a) as being obvious over Hsu et al. (U.S. Patent 5,589,039, hereafter Hsu) in view of Miyata (U.S. Patent 5,519,373) and Tepman (U.S. Patent 5,527,438). The Examiner has also rejected claims 55 and 56 (now 56 and 57) under 35 U.S.C. §103(a) as being obvious over Hsu in view of Miyata and further in view of Tepman (U.S. Patent 5,527,438). The Examiner has further rejected claims 23, 25, 26, 30, and 44 under 35 U.S.C. §103(a) as being obvious over Hsu, Miyata, and Tepman and further in view of Boys et al. (U.S. Patent 4,500,409). The rejections are traversed.

The Examiner's arguments are not understood. The Examiner seems to accept that the claim language requires the magnetic field near the substrate be substantially parallel to the substrate support. The Examiner also seems to accept that Miyata's magnetic field near the target is parallel to the target. The Examiner then concludes that since Miyata's target and substrate are parallel, then Miyata's magnetic field is necessarily extending along the substrate. This conclusion is not supported by Miyata's disclosure in which his flat magnetic field extends along the target and not along the substrate. The language "extends along" the substrate support does not merely mean parallel to the substrate support or merely extending along a direction parallel to the substrate support, it means extending along the substrate support, which clearly

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means near the substrate support, as the Examiner seems to accept. However, to further clarify what seems to already be clear language, the rejected claims have been amended to require the specified magnetic field is at the surface of the substrate, as supported at page 5, line 1 of the filed specification. It is however felt that the prior language implicitly included the newly added language. Claim 21 has been further amended to require that the parallel magnetic field extend across the substrate.

The Examiner seems to understand what is meant to be claimed. Any suggestion for language satisfying the intent would be greatly appreciated

The Examiner's invocation of magnetic fields extending to infinity for explaining why the claim limitation reads on Miyata is not understood.

The Examiner has not recently argued Hsu, but he places his magnets on opposed sides of the substrate and does not conform to an annular magnet surrounding or around a perimeter of the substrate, as recited in claims 21, 27, 41, and 48.

The Examiner has rejected claims 31, 47, and 54 (now 55) under 35 U.S.C. §103(a) as being obvious over Hsu in view of Miyata and further in view of Tepman (U.S. Patent 380,414 [*sic*, 5,380,414], hereafter Tepman '414). Claim 31 has been amended similarly to the other base claims to more definitely distinguish over Miyata, that is, the parallel magnetic field is that near the surface of the wafer. The remaining references do not overcome the deficiency. Tepman '414 discloses a secondary magnetron 11, apparently consisting of horseshoe magnets in back of the platen 4, used primarily during pasting. His horseshoe magnets do not conform to magnets at the periphery and do not produce a parallel magnetic field extending along the substrate. Accordingly, claim 31 should be allowed. The inclusion of claims 47 and 54 dependent upon claims 27 and 41 in this rejection is not understood since these claims merely introduce the target magnetron. In any case, claims 27 and 41 depend from claims believed to be in allowable form.

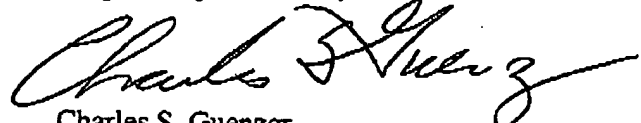
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In view of the above amendments and remarks, reconsideration and allowance of all claims are respectfully requested. The Examiner is invited to contact the undersigned attorney to discuss means for resolving the interpretation of the claims.

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